Editor's note: Overruled to the extent inconsistent with U.S. v. J. Gary Feezor, 74 IBLA 56, 90 I.D. 262 (June 29, 1983)

UNITED STATES
v.
GEORGE R. EDELINE ET AL.

IBLA 78-36 Decided February 13, 1979

Appeal from decision of Administrative Law Judge Robert W. Mesch declaring the Cerro de Oro No. 1 and the Rackensack Nos. 1, 2, and 3 lode mining claims null and void (Arizona 5320-7 and 5320-15).

Affirmed.

1. Mining Claims: Determination of Validity--Mining Claims: Discovery: Generally

   There has been no discovery of a valuable mineral deposit within a lode mining claim unless there has been physically exposed within the limits of the claim the vein or lode-bearing mineral of such quality and quantity as to justify the expenditure of money for the development of a mine and the extraction of the mineral.

2. Mining Claims: Contests

   A Government contest against a mining claim does not lose its public character and become a private contest because the land involved may ultimately be conveyed to a private entity in a land exchange, nor does that possibility warrant the application of any different standard for determining whether there has been a discovery of a valuable mineral deposit within the claim, or a different burden of proof.

3. Mining Claims: Determination of Validity--Mining Claims: Discovery: Generally

In determining whether a claim has been validated by a discovery of a valuable mineral deposit, the Board of Land Appeals adheres to the longstanding distinction between evidence sufficient to warrant only further exploration to find a valuable mineral deposit and that which suffices to prove a discovery of a valuable mineral deposit.

4. Mining Claims: Determination of Validity--Mining Claims: Discovery: Generally--Mining Claims: Discovery: Geologic Inference

In evaluating a mineral deposit within a mining claim geologic inference may be used where the deposit has been adequately physically exposed. However, geologic inference cannot be used as a substitute for evidence which sufficiently shows the existence of an ore body or bodies necessary to warrant a prudent man to develop a valuable mine; geologic inference may not be used to infer mineralization throughout a vein area where the evidence shows a few spots of high mineralization, but the mineralized areas are spotty and discontinuous.

APPEARANCES: W. T. Elsing, Esq., Phoenix, Arizona, for appellants; Demetrie L. Augustinos, Esq., Office of General Counsel, U.S. Department of Agriculture, Albuquerque, New Mexico, for appellees.

OPINION BY ADMINISTRATIVE JUDGE THOMPSON

This is an appeal from the September 23, 1977, decision of Administrative Law Judge Robert W. Mesch declaring the Cerro de Oro No. 1 lode mining claim and the Rackensack Nos. 1, 2, and 3 lode mining claims null and void. The claims are situated within the Tonto National Forest in sec. 4, T. 6 N., R. 5 E., and sec. 33, T. 7 N., R. 5 E., Gila and Salt River meridian, Maricopa County, Arizona.

These proceedings were initiated on behalf of the Forest Service by complaints filed in 1970 and 1971 against these and other claims. Judge Mesch held a hearing in 1971 and ordered a further hearing in 1973 to develop the facts. In a 1974 decision, Judge Mesch held the Cerro de Oro No. 1 claim and the Rackensack Nos. 1, 2, and 3 claims valid and the other claims invalid. The Forest Service appealed from

the determination that the claims were valid, but no appeal was filed from the invalidation of the other claims. The Forest Service moved to remand the case for further hearings on the basis of new evidence, and the motion was granted by this Board in United States v. Edeline, 24 IBLA 34 (1976). Hearings were held in December 1976 and culminated in the decision now under review.

[1] The ultimate issue in determining the validity of mining claims is whether there has been a discovery of a valuable mineral deposit on each of the claims, i.e., whether "minerals have been found and the evidence is of such a character that a person of ordinary prudence would be justified in the further expenditure of his labor and means, with a reasonable prospect of success, in developing a valuable mine * * *." Castle v. Womble, 19 L.D. 455, 457 (1894); approved in Chrisman v. Miller, 197 U.S. 313, 322 (1905). Implicit in this condition is the requirement that the material may be mined, removed and marketed at a profit. United States v. Coleman, 390 U.S. 599 (1968); Converse v. Udall, 399 F.2d 616 (9th Cir. 1968), cert. denied, 393 U.S. 1025 (1969). As to lode claims, the test includes exposure of the mineral within the veins. As stated in Thomas v. Morton, 408 F. Supp. 1361, 1371 (D. Ariz. 1976), aff'd. 552 F.2d 871 (9th Cir. 1977): "there must be physically exposed within the limits of the claim the vein or lode-bearing mineral of such quality and of such quantity as to justify the expenditure of money for the development of a mine and the extraction of the mineral." (Emphasis added.)

In their appeal, contestants make numerous legal and factual assertions. Appellants argue that this is a contest between individuals and that a more liberal discovery test should be applied. Appellants contend that the rule stated in Castle v. Womble, supra, protects claims where minerals are shown to exist but which have not yet been remunerative. They contend that the claims are in a favorable mineral environment. They challenge the competency of the Government's witnesses and those witnesses' understanding of sampling procedure, claiming that their own experts' opinions are more accurate because they are prepared by men who are in the business of advising the mining industry and are better able to estimate what risks may be prudently assumed. They claim that Judge Mesch improperly inferred that these claims were not valuable from the fact that one group of optionees gave up their option, another had not yet begun operation, and no work had been done on the claim in years. Finally, they challenge the validity of the distinction between exploration and development in determining whether a discovery has been made.

It is important that we set forth at the outset the applicable legal principles so that the significance of the evidence may be more fully appreciated.

[2] Appellants note that the land is to be used as the basis of an exchange and contend that a more liberal discovery standard ought

to be applied because this is really a contest between individuals. This contention is wrong for several reasons. First, this is a Government contest, not a contest between individuals. This contest does not lose its public character because the land involved may ultimately be conveyed to a private entity in exchange for other lands. The public purpose in acquiring land by exchange is complemented by the public purpose in clearing the Government's title to the land to be offered in exchange. Second, the stated standard for discovery which applies in Government contests does not differ from the standard applied in private contests. Both use the "prudent man" concept of Castle v. Womble, supra. See, e.g., Thomas v. Morton, supra. Although there is a suggestion in Converse v. Udall, 399 F.2d 616 (9th Cir. 1968), cert. denied, 393 U.S. 1025 (1969), of some difference in the standard, a full reading of the opinion in that case indicates that what the court there was concerned about was how carefully this Department and the courts will review the evidence depending upon the circumstances of the parties, and will evaluate the evidence to determine whether the burden of proof has been met. As this is a Government contest, there is no question but that once the Government has made its prima facie case of lack of a discovery, the ultimate burden to show a discovery of a valuable mineral deposit is upon the mining claimant. United States v. Taylor, 19 IBLA 9, 82 I.D. 68 (1975). Whatever the reasons of the Government are in brining a contest, they do not affect the standards to be applied nor the burden of proof. See, United States v. Howard, 15 IBLA 139 (1974); United States v. Gunn, 7 IBLA 237, 79 I.D. 588 (1972).

[3] Appellants challenge the validity of the distinction made by Judge Mesch in determining whether there has been a discovery between evidence warranting further exploration and evidence warranting development of a mine. We agree with appellants to the extent that they argue a witness' mere characterization of the work that has been done as exploration or development should not be controlling without our specifically considering all the evidence, including the work which has been done and what work may be prudently undertaken in the future. We cannot agree, however, that the distinction should not be made and has no use in evaluating mining claims, nor that the opinion evidence should be disregarded. Appellants refer to a commentator's emphasis on a statement by the court in Converse v. Udall, supra, at 399 F.2d 621, that the real question in the case there "is not whether there is such a distinction, but whether Converse's exploration had resulted in a legal discovery." It is, however, the remarks of the court preceding this conclusion that are more illuminating on the concepts. In answering some arguments similar to those made here, the court stated, at 620-621:

> Converse attacks the Secretary for drawing a distinction between "exploration," "discovery," and "development." But the authorities we have cited show that there is a difference between "exploration" and "discovery." (See, e.g.,

> Cole v. Ralph, supra, 252 U.S. at 294, 296, 307, 40 S.Ct. 321). If the latter word were taken literally, then the finding of any mineral would be a "discovery." Webster, 2d Ed., defines "discover" as "to make known the identity of, * * * by laying open to view, as a thing hidden or covered, to expose; to disclose; to bring to light." But, as we have seen, that alone is not enough. On the other hand, Webster defines "explore" as "to seek for or after, to strive to attain by search." This is exactly what a prospector does, both before he finds the first "indications * * * of the existence of lodes or veins" (United States v. Iron Silver Mining Co., supra, 128 U.S. at 683, 9 S.Ct. at 199) and thereafter until he finds enough mineralization to meet the legal test of a discovery. It is true that some of the cited cases say that "development" and "exploration" mean the same thing (Charlton v. Kelly, supra, 156 F. at 436), or speak of "exploration" after discovery (Lange v. Robinson, supra, 148 F. at 804). But in each of these cases, the court was talking about further work to be done after a sufficient discovery had been made, work which could be called "exploration" or "further exploration," or could also be called "development." They do not support the attack here made upon the distinction between the exploration work which must necessarily be done before a discovery, and the discovery itself, which is what the Secretary talks about when he distinguishes between "exploration" and "discovery."

The application by this Department of these distinctions is illustrated in a case which resembles the instant appeal in many respects in the nature of the deposition of the minerals, United States v. Watkins, A-30659 (October 19, 1967), where, at pages 9 and 10, it was stated:

> In a long line of decisions the Department has distinguished between "exploration" and "development" as they relate to "discovery" under the mining laws. The Department has held that the showing of mineralization which will justify further exploration may not be adequate to warrant development of a mining claim and that it is only when it can be said that a prudent man would be justified in expending his means in the development of a mineral deposit that a discovery has been made. See United States v. Laura Duvall and Clifford F. Russell, 65 I.D. 458 (1959); United States v. Clyde R. Altman and Charles M. Russell, 68 I.D. 235 (1961); United States v. Edgecumbe Exploration Company, Inc., A-29908 (May 25, 1964); United States v. Ford M. Converse, 72 I.D. 141 (1965), sustained in Converse v. Udall, Civil No. 65-581, in the United States District Court for the District of Oregon (September 14, 1966),

appeal [decided in Court decision cited supra]; United States v. Stephen B. Millisich, A-30720 (April 13, 1967); United States v. Lucille Lundy, A-30724 (June 30, 1967). As we stated in the Lundy decision:

> "There is a clear distinction between 'exploration' and 'development' as they relate to discovery under the mining laws. The separate stages of mining activity serve as a basis for determining what further mining activity a prudent man would be justified in undertaking. Exploration work includes such activities as geophysical or geochemical prospecting, diamond drilling, sinking an exploratory shaft or driving an exploratory adit. It is that work which is done prior to a discovery in an effort to determine whether the land is valuable for minerals. When inherently valuable minerals are found, it is often necessary to do further exploratory work to determine whether a valuable mineral deposit exists, i.e., whether the minerals exist in such quality and quantity that there is a reasonable prospect of success in developing a paying mine."

We adhere to the distinction made in Watkins and many other cases between exploration and discovery. Essentially, the distinction goes to the adequacy of proof of the deposit and to the essential issue of the quantity and quality of the mineral deposit. There must be sufficient evidence of the quantity and quality of minerals to be weighed against evidence of probable costs to determine if development of a mine would be warranted or only further exploration to find a sufficient ore body which would warrant a prudent man to invest his money with the expectation of developing a valuable mine. See also, Converse v. United States, supra; United States v. Adams, 318 F.2d 861 (9th Cir. 1963).

[4] In evaluating a mineral deposit geologic inference may be used where the deposit has been adequately physically exposed. However, it cannot be used as a substitute for evidence sufficiently showing the existence of an ore body or bodies necessary to warrant a prudent man to develop a valuable mine. See Henault Mining Co. v. Tysk, 419 F.2d 766 (9th Cir. 1969). One of the issues raised in this case is whether geologic inference may be used to infer the existence of mineralization throughout a vein area where the evidence shows a few spots of high mineralization, but generally the mineralized areas are spotty and discontinuous. The answer to this must be no, because there is not a sufficient factual basis upon which geologic inferences may be drawn. The Watkins case quoted above was affirmed in Barton v.

Morton, 498 F.2d 288 (9th Cir.), cert. denied, 419 U.S. 1021 (1974). There, as here, the mineralization was discontinuously distributed along veins in ore chutes and in enriched zones. There was exposed some mineralization of gold, silver, and other metals along veins. The claimant in Barton argued that the veins constituted the required mineral deposit and they were only searching for further zones of enrichment within the veins which have already been "discovered." In analyzing the appellant's argument the court said, at 291:

> Appellant contends that tunneling or sinking into veins on these claims, as uniformly recommended by the witnesses, would not be "exploration" to "discover" a "valuable mineral deposit," but would be "development" of an already discovered deposit into a paying mine.
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> But a mineralized vein is not the equivalent of a deposit of mineable ore. Such a vein may not contain material of substantial value. In this case, as the Department pointed out, "[i]t is nowhere suggested that any quantity of material of the quality of the vein material thus far disclosed would constitute a mineable body of ore. The evidence does not, in fact, establish any mineral quality of any consistent extent. Although appellants have found ore samples with indicated values exceeding $70 per ton, the record does not support a finding that they have found a deposit yielding ore of that quality, or of any other quality, the exploitation of which may be contemplated. * * *
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> The Department held, and we agree, that there is "no difference between the showing of isolated mineral values, not occurring in a vein, which only suggests the existence of a valuable mineral deposit within the limits of the claim and the showing of isolated values occurring in a vein which only suggests the possible existence of a valuable mineral deposit in the course of the vein. That which is called for in either case is further exploration to find the deposit supposed to exist."

The essence of this holding is that a mineable body of ore may not be inferred merely because some mineralization has been found in a vein; instead, a sufficient delineation of the existence of an ore body must be made to establish the deposit. Basically, the same kind of holding was reached by the Administrative Law Judge in the case before us. The major question here is whether the evidence is adequate to show the discovery of a mineable body of ore within the ambit of the principles discussed above.

We first note the extensive evidence produced on the discovery issue. The testimony taken in the three hearings covered more than

800 pages of transcript. The Government's case was primarily based on the testimony of two Forest Service mineral examiners: Gilbert J. Matthews and Raj H. Daniel. The principal witnesses who testified on behalf of the contestees included George Edeline, the claimant; Donald F. Reed, a mining engineer; Warren J. Brooks, a geologist; Perry Bigbee, one of the principals of Tonto Mining and Milling which once had an option on the property; Don Howe, a general manager of Tonto; Dr. Willard D. Pye, a geologist; Jack S. Hamilton, a more recent general manager of Tonto; Vernon Dale, a mining engineer; and John B. Thompson, a mining operator.

Administrative Law Judge Mesch summarized the relevant testimony with respect to the Cerro de Oro No. 1 claim as follows:

> Mr. Matthews and Mr. Daniel expressed definite opinions that no mineralization of any economic interest had been found within the claim and they would not even recommend the property as being an interesting prospect for further exploration. Mr. Reed stated there had been very little work done on the claim and it would require quite a bit of additional work to determine whether there are commercial ore bodies present on the claim. Dr. Pye testified that he would recommend drilling on the claim to determine the character and depth of the copper mineralization and to ascertain whether any gold and silver veins might be intercepted at depth. He also stated that he would not spend any mining or development money until he did the drilling. Mr. Brooks stated that "[l]ack of information precludes making any estimates of tonnage * * * but it is safe to say that at least a few thousand tons of open pit copper ore exists on the Cerro de Oro #1" (Ex. 0, p. 4) and although "[n]o real costs have been determined" (Ex. 0, p. 6) a "limited tonnage * * * could no doubt be stripped and sent at a profit" to a smelter "in conjunction with other mining on the [Rackensack] property" (Ex. 0, p. 8; Tr. 444).
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> In view of the opinions expressed, I do not believe a person of ordinary prudence would spend his time and money in extracting and marketing the mineralization found within the Cerro de Oro claim. At best, such a person would do no more than direct his efforts to further exploration by drilling as suggested by two of the mining claimants' expert witnesses. Even if one were willing to accept the opinions of Mr. Brooks over those of the other four expert witnesses, he would still have to have more specific information relating to the amount and value of the mineralization the mineralization available for extraction and the costs involved before a rational decision could be reached that a mining operation was warranted.

(Decision p. 14).

Even contestees' own witnesses recognize the lack of information about the claim makes further exploration the only course to be prudently undertaken. Brooks' opinions are too thinly substantiated to support a finding of validity. Judge Mesch properly held the claim invalid.

A similar analysis applies to the Rackensack No. 3 claim. Judge Mesch summarized the evidence respecting that claim as follows:

> Insofar as the Rackensack No. 3 claim is concerned, the lineup of witnesses is the same. Out of the five experts who examined this claim, only Mr. Brooks expressed the opinions that there was economic mineralization on the claim and a person of ordinary prudence would be warranted in commencing a mining operation on the claim. Mr. Brooks based his opinions -- that the Rackensack vein should return a profit in excess of $1,000,000 and there was economic mineralization on each of the three Rackensack claims -- on five composite samples taken from the vein structure exposed on the Rackensack Nos. 1 and 2 which showed an average grade, according to his figures, of 1.25 ounces of gold per ton. Inasmuch as Mr. Brooks took only one sample from the Rackensack No. 3 which showed values of 0.04 ounces of gold per ton, and in view of uncontradicted testimony at the last hearing, it now appears that he reached his conclusions concerning the Rackensack No. 3 by inferring or assuming that the principal vein exposed on the Rackensack Nos. 1 and 2 extended into the Rackensack No. 3.

(Decision p. 15).

Inasmuch as Brooks' testimony was based on geologic inference rather than a discovery of a valuable deposit through physical exposure, Judge Mesch properly disregarded his opinion. Barton v. Morton, supra; Henault Mining Co. v. Tysk, supra. Judge Mesch cites the testimony of the other experts to support his conclusion that more exploration work is needed to yield sufficient information on which to conclude whether or not the claim is valuable:

> Mr. Daniel testified that the vein structure found on the Rackensack Nos. 1 and 2 is not exposed on the Rackensack No. 3. He stated that he took a sample from the only working he found on the claim and the sample showed negligible values. Dr. Pye testified that the main vein on the Rackensack Nos. 1 and 2 is headed straight for the Rackensack No. 3 "and it could pass on to the Rackensack No. 3 claim" (Tr. 113). He also stated that the claim "does need some additional drilling to evaluate it unless

> you are going to just hold it" (Tr. 143) and see what develops from the vein exposed on the other two claims.
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> Inasmuch as (1) the mineralization of interest in the vein structures exposed on the Rackensack Nos. 1 and 2 has not been found on the Rackensack No. 3 and (2) there is no evidence that any other mineralization has been found on the Rackensack No. 3 of sufficient quantity and quality to be considered of any economic interest, it must be concluded that the Rackensack No. 3 has not been perfected by the discovery of a valuable mineral deposit.
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> * * * There is no evidence from which any conclusions can be drawn as to the quantity and quality of the mineralization that allegedly constitutes a valuable mineral deposit within this claim.

(Decision, pp. 15-16).

The Rackensack Nos. 1 and 2 have been more extensively worked. The basic factual issues relating to the question of discovery on these claims were set forth by Judge Mesch as follows:

> There is no dispute in the evidence that high gold values can be obtained from what has variously been termed the main, principal or Rackensack vein or vein structures exposed on the Rackensack Nos. 1 and 2. There is no disagreement with the conclusion that the mineral values are spotty and sporadic with no systematic distribution. The questions are whether the "hot spots" or pockets of high mineralization occur at frequent enough intervals and are of sufficient size to warrant a mining operation, and whether, on the basis of information presently available, sufficiently accurate estimates of tonnage and values can be made to warrant a mining operation.

(Decision, p. 17).

In evaluating the evidence on these claims, we reiterate that while geologic inference may be used to estimate the extent of a continuous deposit, it may not be used to establish the validity of a claim where valuable mineralization is alleged to exist in separate deposits (hot spots or ore chutes) along a vein. The court's decision in Barton v. Morton, supra, indicates that the deposit must be sufficiently physically exposed or delineated to constitute a mineable body of ore in order to sustain a determination that the claim is valid.

Judge Mesch, summarized the evidence and stated his conclusions as follows:

> The history of past activities suggests that the mineralization is not such as to warrant any production efforts. The mineralization within the two claims has been the subject of investigations since at least the early 1900's. There are numerous pits, shafts, cuts, tunnels, adits and other workings on the claims. Dr. Pye reported that "over 1,000 feet of underground workings are present in the main mined area" (Ex. C, p. 16). Old records indicate some production in the past. The amount and value of the production is not disclosed by the evidence. The contestees have been interested in the claims since 1966. During the 10-year period prior to the third hearing, they made one shipment of 10 tons. This was in 1971 and only for informational purposes. Tonto Mining and Milling Company, allegedly as a result of Mr. Brooks' findings and conclusions, spent over $80,000 on the property. They did not produce any ore.
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> The testimony of four witnesses supports the conclusion that the claims do not, at the present time, merit consideration from a mining standpoint. Mr. Matthews and Mr. Daniel expressed the opinions that the claims are not even worthy of further exploration work. They thought the claims had been adequately explored in the past and there were sufficient workings to make an evaluation of the mineralization. Based upon their investigations and the results of sampling, they would not recommend the expenditure of further money on the property. Mr. Reed expressed the opinions that the property is a unique and very promising prospect and the extent of the mineralization should be determined by additional exploratory work. He characterized the claims as being in an exploration rather than development stage and stated that it would be impossible to state or estimate what the average value per ton of the ore might be without additional and extensive work. He thought it would be foolish to spend money for a mill only to find that there was not enough ore to amortize its cost. Dr. Pye testified there was not enough data available at the present time to arrive at a reliable estimate of the number of tons of ore or the value of the ore that might be available for extraction. He indicated the high grade or rich pockets of mineralization are relatively limited in occurrence and extent. He stated you might go 1 foot, 100 feet or 1,000 feet before you hit another rich pocket. He stated a first-class evaluation of the property would require additional investigation and exploration work and as a

result of that work a decision would be made to mine or not to mine.

The testimony of two witnesses indicates a person would, without any further exploration work, be justified in commencing an operation to extract and market the mineralization. Mr. Brooks estimated there were 14,700 tons of ore with an average grade of 1.25 ounces of gold per ton which should return a profit in excess of $1,000,000. Mr. Dale estimated there were 1,000 tons of high grade flux ore with an average grade of 1.0 ounces of gold per ton which should return a profit close to $75,000.

In view of the past history of the claims and the opinions expressed by the experts, I do not believe a prudent person would spend time and money extracting and marketing the mineralization within the Rackensack Nos. 1 and 2. Again, at best, such a person would do no more than direct his efforts to further investigation and exploration as recommended by the mining claimants' two witnesses, Mr. Reed and Dr. Pye.

Without making a choice between the opinions and conclusions of Mr. Matthews and Mr. Daniel and those of Mr. Reed and Dr. Pye concerning the merits of spending further exploration time and money, I accept the conclusions of the latter and, in particular, those of Dr. Pye that reliable estimates of the amount and value of the mineralization cannot be made on the basis of data available at the present time. Accordingly, I reject the estimates of quantity and quality advanced by Mr. Brooks and Mr. Dale. Even if Mr. Reed and Dr. Pye had not presented definite opinions that the quantity and quality of the mineralization could not be determined with any reliability, I do not believe, in view of the evidence developed at the three hearings, that a prudent person would consider Mr. Brooks' or Mr. Dale's estimates of quantity and quality sufficiently reliable to commence a mining operation in an attempt to reap a profit by extracting and marketing the mineral.

(Decision, pp. 17-18).

All of appellants' witnesses pin the prospects of success on the geologic inference of unexposed values further along the vein; no one contends that a mining operation can be sustained for any reasonable period solely on the basis of the deposits that are exposed presently. While appellants contend that an immediate profit can be realized by mining bodies of exposed ore, the exposed deposits are of such limited

extent and their removal such a short-term matter that it would not constitute the development of a mine. As Dr. Pye's testimony indicates, the purpose of mining these exposed deposits would be only to provide sufficient working capital to finance further exploration to expose the other deposits on which a reasonable prospect of success depends.

In short, the activity appellants would characterize as "development work" is merely a substitute for exploration which would establish the value of the deposit and determine whether or not a discovery had been made. As we shall explain below, the failure to physically expose or delineate the deposits vitiates appellants' other objections to Judge Mesch's decision.

There is no merit to appellants' objection that Judge Mesch drew improper inferences from the lack of development of the claims. The Judge explained the reasonableness of such inferences by quoting United States v. Flurry, A-30887 (March 5, 1968), in his decision. See also Meluzzo v. Morton, 534 F.2d 860 (9th Cir. 1976). Even if appellants' explanations for the lack of development were deemed adequate to rebut these inferences, the invalidity of the claims must still be sustained because the existence of the deposits necessary to validate the claims has not been physically established.

Although appellants have further observed that the prudent man rule protects claims where minerals are shown to exist but which have not yet been remunerative, citing Castle v. Womble, supra, this observation affords a claimant no relief where there is insufficient physical exposure of the deposits upon which the validity of the claim depends. See Barton v. Morton, supra at 291-92. United States v. Wells, 30 IBLA 333 (1977); United States v. Arizona Mining and Refining Co., 27 IBLA 99, 105 (1976). The latter cases emphasize there must be proof of continuous mineralization along the course of a vein and the mere showing of disconnected pods of mineral concentration even of high values is not sufficient.

Although appellants attack the competence and credibility of the Government's witnesses and offer the testimony of their own witnesses as more accurate, our decision that the claims are not valid is based on a finding of fact concerning which the record shows little disagreement: the existence of the deposits necessary to validate the claims had not been physically established. 1/ Judge Mesch expressly

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1/ Appellants fault the Government for not having made as rigorous an examination of the claims as a private mineral examiner would be expected to do. This objection may arise in part from a misconception of the Government's responsibility in bringing a contest against a mining claim. As we have indicated, the Government only bears the burden of making a prima facie case against the validity of the claim.

based his determination that more exploratory work is needed on the testimony of Dr. Pye, one of the contestee's witnesses. Even if there were defects in the Government's case, the Judge may properly base a determination of invalidity on the contestee's own evidence. See United States v. Taylor, supra.

Appellants' observation that the claims are in a favorable mineral environment bears little weight in determining the validity of a claim where the existence of the deposits has not been physically established. Barton v. Morton, supra; Hennault Mining Co. v. Tysk, supra. United States v. Wells, supra; United States v. Arizona Mining and Refining Co., supra. 2/

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fn. 1 (continued)
This is accomplished by the testimony of a mineral examiner that he has examined the claim and concluded that there has been no discovery of a valuable mineral deposit. The burden then shifts to the mining claimant who must prove by a preponderance of the evidence that there is a discovery of a valuable mineral deposit. Appellants note that a Gilbert Matthews, a witness for the Forest Service, testified how he would examine the claims as a private consultant and they fault him for not having used the same method to sample the claims for this contest. Mr. Matthews' testimony makes clear that he was giving his recommendation for further exploratory work. The Government's mineral examiner need only sample the exposed workings made available to him by the claimant. Although a private consultant might undertake drilling and other work to expose other deposits or determine the extent of those already found, this is beyond the Government's responsibility. It is not the duty of a Government mineral examiner to do a claimant's discovery work for him. See generally, Humboldt Placer Mining Co. v. Secretary of the Interior, 549 F.2d 622, 624 (9th Cir. 1977), cert. denied, U.S. , 98 S. Ct. 125.

2/ The fact a patent application has not been filed in this case makes no difference in the standard of discovery or the burden of proof here. Whether a patent application is rejected because of a lack of discovery or it is found in a nonpatent case that there is no discovery, the result is the same, the claim must be declared null and void. United States v. Carlile, 67 I.D. 417 (1960). There is only a procedural difference if the Government fails to make a prima facie case of lack of discovery and there is no other evidence to establish the lack of discovery. In a nonpatent case, the Government contest would be dismissed. In a patent case, although the Government's case would be dismissed for failure to prove the charge in the complaint, it would be incumbent upon the Government to examine the application further to assure that all the requirements for patent have been satisfied, such as the necessary monies paid, publication requirements satisfied, etc. United States v. Taylor, 19 IBLA 9, 82 I.D. 68 (1975). Nevertheless, the burden of proof on the discovery issue remains the same. Id.

Therefore, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 CFR 4.1, the decision appealed from is affirmed.

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Joan B. Thompson
Administrative Judge

I concur:

_____
Anne Poindexter Lewis
Administrative Judge

ADMINISTRATIVE JUDGE BURSKI DISSENTING IN PART:

While I agree with the majority that appellants have not met their burden of preponderation on the issue of the existence of a discovery on the Cerro de Oro No. 1 and the Rackensack No. 3 lode mining claims, I find myself in disagreement with both the majority and Administrative Law Judge Mesch as this issue relates to the Rackensack Nos. 1 and 2. The decisions of both Judge Mesch and the majority herein are, to a large extent, premised on their analyses of Dr. Pye's testimony. While I agree that Dr. Pye's testimony is deserving of great weight, I disagree with the use of Dr. Pye's testimony as a basis upon which to predicate the finding of invalidity of the Rackensack Nos. 1 and 2. A reading of Dr. Pye's total testimony, when applied to the applicable law, leads me to the conclusion that a discovery has been made on these two claims.

Before analyzing Dr. Pye's testimony, however, I wish to underline a basic problem which I perceive emanating from United States v. Watkins, A-30659 (October 19, 1967) and its affirmation by the Ninth Circuit in Barton v. Morton, 498 F.2d 288 (9th Cir. 1974). In short, the controlling principle of these two decisions is that where a vein carrying spotty and discontinuous mineralized areas has been exposed but the exposed mineralization does not constitute a mineral deposit capable of development and the existence of such a deposit can only be inferred through geologic inference, a discovery has not been made, within the meaning of the mining laws. 1/ When this standard is examined in vacuuo it clearly accords with recent perceptions of the

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1/ There is one notable facet of the circuit court's decision in Barton which is not reflected in the Department's decision in Watkins. At the end of its opinion affirming the Watkins decision, the circuit court opined:

"The reason for accepting less than demonstrated profitability as a condition to patentability is to encourage the investment of capital in the development of mineral resources. No doubt it would further that purpose to offer the incentive of patentability to "prudent" prospectors as well as "prudent" mine developers. But there are other considerations. A patent passes ownership of public lands into private hands. So irrevocable a diminution of the public domain should be attended by substantial assurance that there will be a compensating public gain in one form of an increased supply of available mineral resources. The requirement that actual discovery of a valuable mineral deposit be demonstrated gives weight to this consideration.

Denial of a patent does not bar a claimant from continuing the search for a valuable mineral deposit; it only withholds passage of title until that discovery is made." 498 F.2d at 292 (Footnote omitted).

The court, thus, seemed to place great emphasis on the fact that the case involved a patent application. Such is not true in the instant appeal.

requirements for a discovery. It is only when this standard is applied to various factual constructs that an inherent inconsistency is made apparent.

Assume, for example, a mineral deposit similar to the one at issue where it is obvious to all parties that high values can be obtained at intermittent areas, normally just below or above the intersections of two veins. If no work has been done in extracting the mineral showings there seems to be no difficulty in applying the Barton rule. But let us suppose that the claim is being mined and a profit is being obtained. Is there then a discovery? Not within the confines of the Barton rule. This is so because the essential element of the Barton test, the exposure of a mineral deposit which would justify a prudent man in the expenditure of his labors and means with a reasonable prospect of success in developing a paying mine, can still

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fn. 1 (continued)

While the Department has long adhered to the view that the standard to be applied in determining whether a discovery exists is not dependent upon whether or not a patent application has been filed, recent Board decisions have, to some extent, recognized a functional difference between these two situations. Thus, in United States v. Taylor, 19 IBLA 9, 82 I.D. 68 (1975), the Board noted that a dismissal of a contest would be proper if the only issue raised and joined was that of marketability as of July 23, 1955, and the contestee had clearly prepondered on that question, in spite of unresolved questions going to other facets of a claim's validity. The decision continued:

"The foregoing paragraph assumes that a patent application has not been filed. If a patent application has been filed, it is essential for this Department to determine whether all the requisites of the law have been met before patent may issue. If there has not been evidence presented on an essential issue, or issues, dismissal of the contest will not fulfill this Department's obligation to act 'to the end that valid claims may be recognized, invalid ones eliminated, and the rights of the public preserved.' Cameron v. United States, 252 U.S. 450, 460 (1920). Therefore, in a patent proceeding, it would be essential to order a further hearing to make a proper determination on the essential issue." 19 IBLA at 26, 82 I.D. at 74.

It is true that the Board has yet to apply a different standard of proof in a case involving a patent application vis-a-vis a simple mining contest. But I do not think that the Board can ignore the clear emphasis which the court in Barton placed on the pendency of the patent application when the Board is applying the Barton precedent to a simple contest proceeding. To the extent to which the animating consideration of the Barton court was the "diminution of the public domain," we must recognize that this rationale is not necessarily applicable in the fact situation of the present appeal.

not be shown. It is only through the application of geologic inference, which the Barton rule directly eschews, that a discovery of valuable mineral deposit can be shown when the mineral deposition has occurred in a spotty and discontinuous form. 2/

I will admit that I have yet to formulate a concrete rule which would be fairly applicable to all of the varied and myriad fact situations which may arise in the mining and location of claims which evidence spotty and discontinuous mineralization. I do think, however, that geologic inference must, to some extent, be permitted if we are not to frustrate the intention of the Congress in the adoption of the mining law.

Turning to the question of the existence of a discovery on the Rackensack Nos. 1 and 2, the majority correctly points out that a witness' characterization of work done as either "exploration" or "development" should not be controlling. Similarly, there is no doubt that the difference between these two concepts is of seminal importance in determining the existence of a discovery. Yet, it is precisely on this point that I believe both Judge Mesch and the majority err in their evaluation of Dr. Pye's testimony.

The testimony cited by the majority does, on its face, support the conclusion that the Rackensack Nos. 1 and 2 are invalid. Reading this testimony in context with other statements by Dr. Pye, however,

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2/ It is interesting to note that the Government's witnesses in the instant case constantly reiterated their belief that further exploration would be necessary before a discovery could be shown. Indeed, core drilling was specifically suggested (Tr. III at 68-70). It is difficult to see how this would really solve appellants' problem since any area which was core drilled, given the admitted spotty nature of any deposit which was likely to be found, would have limited utility beyond a showing that a specific area did or did not have high grade mineralization. Core drilling would not, even if high grade areas were hit, show the existence of a valuable mineral deposit. This problem was actually alluded to by the Government witness Mathews who noted:

"In this type of deposit, you just can't beat the old Mexican way of sticking with the vein. Diamond drilling, if you drill it, with the spotty nature of it, it is conceivable you would hit blank areas and it wouldn't give you a true picture. You might hit a spot, a high grade spot and that would give you a good answer but it would take awfully close drilling to make an evaluation.

"The best way, and I told George this, was to get on the vein and follow it out." (Tr. III at 256.)

Thus, to the extent that core drilling is discounted as a method of sampling the vein, it becomes difficult to see how a discovery could ever be shown on such a deposit.

leads me to the opposite conclusion. I think it would be useful to review the evidence cited by the majority as it relates to Rackensack Nos. 1 and 2.

The majority and Judge Mesch noted that Dr. Pye stated that there was not enough data available at the present time to arrive at a reliable estimate of the number of tons of ore or the value of the ore that might be available. Further, both the majority and Judge Mesch noted that Dr. Pye "indicated the high grade or rich pockets of mineralization are relatively limited in occurrence and extent," and that he had stated that "you might go 1 foot, 100 feet or 1,000 feet before you hit another rich pocket." Finally, it was stated that Dr. Pye had declared that "a first-class evaluation of the property would require additional investigation and exploration work and as a result of that work a decision would be made to mine or not to mine" (Dec. at 17-18).

I believe that these observations must be read in conjunction with other statements made by Dr. Pye if we are to give real focus to the testimony which he clearly sought to provide. Thus, Dr. Pye expressly noted: "Well, I think on this, based on the sampling and knowing where the samples were taken, if the mining claimant went in to the high grade spots, the areas of high grade gold as reported in the samples and mine out that portion of the vein, he could make a profit, I think" (Tr. III at 125). After this statement, the following colloquy ensued:

> Q. [Mr. Elsing] And in your opinion, would a prudent man be justified in spending time and money with a reasonable expectation of developing a mine?
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> A. That comes into the definition of a prudent man. If he had the resources so he could afford to "gamble" a certain amount of money, and might not get a return on it. In other words, he would take a certain amount of risk, yes, I believe he might go in and invest his money.
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> Q. Reasonably, you think there is a marketable product on these claims?
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> A. For a small operation, I believe a profit could be made.

(Tr. III at 125).

I believe that two facts can be fairly discerned from this testimony. First, Dr. Pye disagreed with the optimistic assessment of Warren Brooks, a geologist who had been contestees' witness at the second hearing, as to the amount of profit that could reasonably be anticipated from the known data. Second, it seems equally clear that

Dr. Pye felt that a small mining operation could be run with a reasonable expectation of success.

This second conclusion is strengthened by other statements which Dr. Pye made. Thus, in response to a question relating to whether he would recommend drilling on the Rackensack Nos. 1 and 2 (as he had on the Rackensack No. 3), Dr. Pye stated: "Yes, I think if you have money to drill. In that sense, yes, go ahead and do some drilling, but 1 and 2 have had much more exploration and you could begin to develop those two veins" (Tr. III at 138).

Further, in response to an inquiry from Judge Mesch, Dr. Pye stated:

> THE WITNESS: Well, between the hot spots there are values too. There are the hot spots, but there are also the areas of lower grade. I don't mean the vein has absolutely nothing in it between, but the main values of the veins are going to be the hot spots with subsidiary contributions at least covering part of the cost, if not the total cost of developing between, and it's true that in most epithermal deposits, the high zones of mineralization do carry a lot of the miners but there are extremely high values in epithermal deposits.

(Tr. III at 150-51). 3/

To my mind, the entire thrust of Dr. Pye's testimony is that a discovery, albeit of limited reasonable potential, has been made within the limits of the Rackensack Nos. 1 and 2.

The only other consideration which I deem worthy of note is the inferences which may fairly be drawn from the lack of development of the claims. I do agree that failure to develop is a proper consideration in testing the validity of a mining claim. I have trouble in the instant case, however, since there is affirmative evidence which bolsters the appellants' claim of a discovery which is not credited in either Judge Mesch's or the majority's decision.

One of the major points raised by the Government was that the Tonto Mining and Milling Company, which, at the time of the second hearing, had leased the claims from appellants, had subsequently relinquished its lease. From this fact, the Government sought to draw

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3/ I think it important to note that the above-quoted testimony immediately follows the statement of Dr. Pye, cited by both Judge Mesch and the majority, that he was unable to make a reliable estimate of the quantity or quality of the mineralization on the claim.

an inference that the claims were not valuable. At the third hearing, however, the General Manager of Tonto testified that work on the claims had been suspended in 1973 for reasons unrelated to the claims (Tr. III at 153), and that Tonto had continued to pay the mining claimants for the right to enter on the claim (Tr. III at 154-55). Not only do I think that this testimony effectively negated any inference which the Government sought to draw from the suspension of Tonto's operations, but I also believe that this evidence is correctly weighted as favorable to the contestees. Thus, in United States v. Charleston Stone Products, 9 IBLA 94 (1973), the Board noted that payments of $200 a month to the lessor, "was probative of the claim's real marketability." Id. at 107. 4/ Herein, the payments were graduated from $1,000 to $4,000 a month (Tr. II; Exh. R). Moreover, the action of the Lackey group, in entering into a lease sales agreement with the mining claimants in 1977 (Tr. III; Exh. I), is similarly probative of the claims' marketability.

In sum, I believe that appellants' evidence as it relates to the Rackensack Nos. 1 and 2 preponderated over the showings of the Government. Accordingly, I would affirm the decision of Judge Mesch declaring the Cerro de Oro No. 1 and the Rackensack No. 3 lode mining claims

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4/ The Charleston Stone Products case has had a checkered history since the 1973 decision. It was appealed, and on appeal the district court reversed the Board in an unreported decision. (Civil No. LV-2039-BRT, D. Nev. November 7, 1974). The Department of the Interior then pursued an appeal to the Ninth Circuit Court of Appeals which affirmed the district court, 553 F.2d 1209 (1977). In the course of its opinion, however, the Ninth Circuit ruled that water was a locatable mineral. The novelty of this ruling impelled the Justice Department to petition for a writ of certiorari, which was granted by the United States Supreme Court. On this limited issue, the Supreme Court reversed the Ninth Circuit in a decision reported at 98 S.Ct. 2002 (1978). On November 22, the circuit court vacated its earlier decision, over the dissent of the author of the circuit court's original decision, and remanded the case to the district court. On December 13, 1978, the district court vacated and set aside its earlier ruling and returned the case to its civil docket. Subsequently, the circuit court, apparently unaware that the district court had already vacated its decision, issued an order dated January 3, 1979, affirming the district court's decision.

While it is difficult to state with definitude all the ramifications flowing from these meanderings at least two facts seem relatively clear: (1) water is not a locatable mineral; and (2) the statement quoted in the text has not been reversed.

null and void, and reverse his similar findings as to the Rackensack Nos. 1 and 2. 5/

James L. Burski
Administrative Judge

5/ The Forest Service has pressed an issue not discussed by the majority that might bear on my conclusion. It contends that an application for a private exchange filed by the Forest Service on May 18, 1970, segregated certain lands from the mining laws. Included was all of the Rackensack No. 1 and part of the Rackensack No. 2. Judge Mesch rejected this argument in his decision of March 5, 1974. He noted that under the regulations in existence in 1970, there was no reference to the effect of an exchange application, and the filing of the application in the instant case did not effectuate a withdrawal under 43 CFR 2091.2-5 and Subpart 2351. Additionally, while he also recognized that the regulations had been amended in November 1971 to expressly segregate lands upon the filing of a formal application of exchange "under Group 2200" he felt that for various reasons of regulatory construction, this would not apply to exchanges of Forest Service administered lands for other lands which were to be administered by the Forest Service.

While I feel that Judge Mesch was certainly correct as to his analysis of the regulations prior to their amendment in November 1971, I am less convinced of the correctness of his analysis of the effect of that amendment. The majority, inasmuch as it has found the mining claims null and void regardless of any segregative effect of the application for an exchange, has not addressed this question. For different reasons, I also find this issue irrelevant within the confines of this case.

First of all, the Forest Service failed to present any evidence which would delineate the existence or absence of a discovery in November 1971, which could serve as a predicate for a finding of invalidity as of that date. Secondly, under the rule enunciated in United States v. Foresyth, 15 IBLA 43 (1974) a mineral claimant may sample an existing deposit to confirm a discovery made prior to a withdrawal. Cf. United States v. Porter, 37 IBLA 313, 316 (1978). Considering the nature of the deposition of mineralization in the instant case, all actions taken since 1971 seem to clearly fit into the confines of the Foresyth rule.